Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A network device configured to control communication of data frames between stations, comprising:

a plurality of receive ports configured to receive data frames from the stations;

a buffer configured to buffer the received data frames;

queuing logic configured to:

obtain a frame pointer for each of the received data frames, each frame pointer identifying a location in a memory located externally from the network device, and

transfer each of the received data frames to the external memory for storage in a location identified by one of the respective frame pointers;

a memory configured to store address information and data forwarding information associated with the received data frames; ~~and~~

processing logic configured to:

process and forward the received data frames to destination addresses without modifying the received data frames, when the network device is operating in accordance with a first protocol, and

process and forward the received data frames to destination addresses, at least one of the received data frames being modified before being forwarded, when the network device is operating in accordance with a second protocol; and

a register configured to store information indicating whether the network device is operating in accordance with the first protocol.

2. (original) The network device of claim 1, wherein the first protocol is an IEEE 802.1D protocol and the second protocol is an IEEE 802.1Q protocol.

3. (currently amended) The network device of claim 1, ~~further comprising:~~

~~a register configured to store information indicating whether the network device is operating in accordance with the first protocol,~~ wherein the processing logic is further configured to:

read the contents of the register, and

determine whether the network device is operating in accordance with the first protocol or the second protocol based on the contents of the register, the first protocol being an IEEE 802.1D protocol and the second protocol being an IEEE 802.1Q protocol.

4. (currently amended) The network device of claim 1, wherein when the network device is operating in accordance with the first protocol, the processing logic is configured to:

retrieve a data frame received on one of the plurality of receive ports from ~~an~~ the external memory, and

forward the received data frame to at least one port identified by the data forwarding information without at least one of inserting virtual local area network (VLAN) information

into the received data frame, deleting VLAN information included with the received data frame ~~and~~ or modifying VLAN information included with the received data frame.

5. (currently amended) The network device of claim 4, wherein the data forwarding information identifies a first transmit port and a first VLAN and when the network device is operating in accordance with the second protocol, the processing logic is configured to:

retrieve a data frame received on one of the plurality of receive ports from ~~an~~ the external memory,

at least one of insert VLAN information into the received data fame, delete VLAN information included with the received data frame ~~and~~ or modify VLAN information included with the received data frame, based on whether the first transmit port is a member of an untagged set for the first VLAN, and

forward the received data frame to the first transmit port.

6. (currently amended) The network device of claim 1, wherein the processing logic is further configured to:

identify data forwarding information for a first one of the received data frames, generate a forwarding descriptor for the first data frame, the forwarding descriptor including:

an untagged set field identifying at least one transmit port, and

an opcode field including information identifying whether the first data frame was at least one of untagged, VLAN-tagged ~~and~~ or priority-tagged.

7. (original) The network device of claim 6, wherein the processing logic is further configured to:

delete a VLAN tag in the first data frame based on the contents of the untagged set field and the opcode field and whether the network device is operating in accordance with the second protocol.

8. (currently amended) In a network device that controls communication of data frames between stations, a method comprising:

setting an operating mode to at least one of a first operating mode and a second operating mode for the network device;

storing information in a memory of a network device, the information including address information and data forwarding information;

receiving data frames on a plurality of receive ports of the network device;

obtaining a frame pointer for each of the received data frames, each frame pointer identifying a location in an external memory relative to the network device;

transferring each of the received data frames to the external memory for storage in a location identified by one of the respective frame pointers;

transferring frame headers associated with the received data frames for processing;

processing the frame headers and forwarding the received data frames to destination addresses without modifying the received data frames, when the network device is in the first operating mode; and

processing the frame headers and forwarding the received data frames to destination addresses, at least one of the received data frames being modified before being forwarded, when the network device is in the second operating mode.

9. (original) The method of claim 8, wherein the first operating mode corresponds to an IEEE 802.1D mode and the second mode corresponds to an IEEE 802.1Q mode.

10. (original) The method of claim 8, wherein the setting an operating mode includes:

initializing a register, the register indicating whether the network device is operating in the first or second operating mode.

11. (currently amended) The method of claim 8, wherein when the network device is operating in the first operating mode, the method further comprises:

retrieving a data frame received on one of the plurality of receive ports from ~~an~~ the external memory; and

forwarding the received data frame to at least one port identified by the data forwarding information without at least one of inserting virtual local area network (VLAN) information into the received data frame, deleting VLAN information included with the received data frame ~~and~~ or modifying VLAN information included with the received data frame.

12. (currently amended) The method of claim 11, wherein the data forwarding information identifies a first transmit port and a first VLAN and when the network device is operating in the second operating mode, the method further comprises:

retrieving a data frame received on one of the plurality of receive ports from ~~an~~ the external memory;

determining whether the first transmit port is a member of an untagged set for the first VLAN;

at least one of inserting VLAN information into the received data fame, deleting VLAN information included with the received data frame ~~and~~ or modifying VLAN information included with the received data frame, based on whether the first transmit port is a member of an untagged set for the first VLAN; and

forwarding the data frame to the first transmit port.

13. (currently amended) The method of claim 8, further comprising:

identifying data forwarding information for a first one of the received data frames; and

generating a forwarding descriptor for the first data frame, the forwarding descriptor including:

an untagged set field identifying at least one transmit port, and

an opcode field including information identifying whether the first data frame was at least one of untagged, VLAN-tagged ~~and~~ or priority-tagged.

14. (original) The method of claim 13, further comprising:

deleting a VLAN tag in the first data frame based on the contents of the untagged set field and the opcode field and whether the network device is operating in the second operating mode.

15. (currently amended) A network device comprising:

a plurality of receive ports configured to receive data frames from a plurality of stations;

a plurality of transmit ports configured to transmit data frames;

queuing logic configured to:

obtain a frame pointer for each of the received data frames, each frame pointer identifying a location in a first memory, the first memory being located externally with respect to the network device, and

transfer the received data frames to the first memory for storage in a location identified by one of the respective frame pointers;

a second memory configured to store address information and data forwarding information associated with the received data frames;

a decision making engine configured to:

identify data forwarding information for a first one of the received data frames, the data forwarding information identifying at least a first one of the transmit ports and a first virtual local area network (VLAN);

generate a forwarding descriptor for the first data frame, the forwarding descriptor including:

an untagged set field identifying at least one transmit port, and

a first opcode field including information identifying whether the first data frame was at least one of untagged, VLAN-tagged ~~and~~ or priority-tagged; and

processing logic configured to:

generate a second opcode to indicate that the first data frame is to be transmitted without modification, when the network device is operating in accordance with a first protocol, and

generate a second opcode to indicate that the first data frame is to be transmitted without a VLAN tag, the first data frame is to be transmitted with a VLAN tag or the first data frame is to be transmitted without modification, when the network device is operating in accordance with a second protocol and based on the contents of the untagged set field and the first opcode field.

16. (original) The network device of claim 15, wherein the first protocol corresponds to an IEEE 802.1D protocol and the second protocol corresponds to an IEEE 802.1Q protocol.

17. (currently amended) The network device of claim 15, further comprising:

a plurality of transmit modules corresponding to the transmit ports, at least a first one of the transmit modules being configured to:

retrieve the first data frame from ~~an external~~ the first memory, and

forward the first data frame to at least the first transmit port without at least one of inserting VLAN information into the first data frame, deleting VLAN information

included with the first data frame ~~and~~ or modifying VLAN information included with the first data frame, when the network device is operating in accordance with the first protocol.

18. (currently amended) The network device of claim 17, wherein the first transmit module is further configured to:

at least one of insert VLAN information into the first data fame, delete VLAN information included with the first data frame ~~and~~ or modify VLAN information included with the first data frame, when the network device is operating in accordance with the second protocol and based on the second opcode, and

forward the first data frame to at least the first transmit port.

19. (original) The network device of claim 15, wherein the decision making device is further configured to assign a default VLAN index to received data frames when the network device is operating in accordance with the first protocol.

20. (currently amended) The network device of claim 19, wherein the decision making device is further configured to at least one of assign a VLAN index to a received data frame based on the port on which the data frame was received ~~and~~ or assign a VLAN index to a received data frame based on a VLAN identifier included in the received data frame, when the network device is operating in accordance with the second protocol.